

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A variable length stent deployment apparatus for use in a body vessel comprising:
 - a flexible catheter body having a proximal end and a distal end adapted for positioning in the vessel;
 - a stenting structure releasably ~~releasable~~ held by the catheter body in an unexpanded configuration, the stenting structure being movable from the unexpanded configuration to an expanded configuration adapted to engage a wall of the vessel; and
 - a deployment mechanism coupled to the catheter body adapted to apply a radially outward force along a selected length ~~deploy a deployable portion~~ of the stenting structure to deploy a portion of the stenting structure having said length ~~having a selectable length~~, wherein the deployed ~~deployable~~ portion having said length is released into the vessel in the expanded configuration while a remaining portion of the stenting structure remains releasably held by the catheter body in the unexpanded configuration.
2. (Currently amended) The variable length stent deployment apparatus of claim 1 wherein the stenting structure comprises a plurality of stent segments, the deployment mechanism being adapted to select one or more of the stent segments for inclusion in the deployed ~~deployable~~ portion.
3. (Currently amended) The variable length stent deployment apparatus of claim 2 wherein the deployment mechanism is adapted to deploy the ~~a~~ plurality of stent segments simultaneously.

4. (Currently amended) The variable length stent deployment apparatus of claim 2 further comprising a constraining element for constraining expansion of a selected stent segments which are not to be deployed segment.

5. (Currently amended) The variable length stent deployment apparatus of claim 4 wherein the constraining element is a sheath retractably disposed over the ~~selected stent structure and deployment mechanism~~segment.

6. (Currently amended) The variable length stent deployment apparatus of claim 1 wherein the deployment mechanism comprises an expandable member on the catheter body, the ~~deployable~~ portion of the stenting structure to be deployed being positionable over the expandable member for expansion thereby.

7. (Currently amended) The variable length stent deployment apparatus of claim 6 wherein the length of the expandable member can be selected to provide a preselected ~~modified according to the length of the~~ deployed ~~deployable~~ portion.

8. (Original) The variable length stent deployment apparatus of claim 7 wherein the length of the expandable member can be modified by a sheath slidably disposed over the expandable member for constraining expansion of a selected portion of the expandable member.

9. (Original) The variable length stent deployment apparatus of claim 6 wherein the stenting structure is movable relative to the expandable member, further comprising a stent positioner for moving a selected portion of the stenting structure relative to the expandable member.

10. (Currently amended) The variable length stent deployment apparatus of claim 1 further comprising a valve member on the catheter body adapted to separate the ~~deployable~~ portion of the stent structure to be deployed from the remaining portion.

11. (Currently amended) The variable length stent deployment apparatus of claim 1 wherein the stenting structure has a leading end closest to the distal end of the catheter body, and the ~~deployable~~ portion of the stenting structure to be deployed extends proximally a selectable length from the leading end thereof.

12. (Currently amended) The variable length stent deployment apparatus of claim 1 wherein the stenting structure is continuous throughout the length thereof, and the deployment mechanism is adapted to engage a selected location along said stenting structure to separate the ~~deployable~~ portion of the stenting structure to be deployed from a remaining portion of the stenting structure ~~at a selectable location~~.

13. (Cancelled)

14. (Currently amended) The variable length stent deployment apparatus of claim 12 wherein the deployment mechanism is adapted to release ~~deploy~~ the deployed portion of the stenting structure ~~to the desired length~~ distally from the distal end of the catheter body.

15. (Currently amended) The variable length stent deployment apparatus of claim ~~[[13]]~~ 12 wherein the stenting structure is severed by the deployment mechanism following deployment from the catheter body.

16. (Original) The variable length stent deployment apparatus of claim 12 wherein the stenting structure is a coil.

17. (Original) The variable length stent deployment apparatus of claim 12 wherein the stenting structure is a mesh.

18.-19. (Cancelled).

20. (Currently amended) A method of deploying a stent of selectable length in a vessel, the method comprising:

endovascularly positioning a catheter in the vessel, the catheter having a distal end and stenting structure releasably disposed therein;

uncovering positioning a deployable-portion of the stenting structure prior to in a position suitable for deployment from the catheter;

determining a desired stent length;

adjusting the length of the uncovered deployable-portion to be at least equal to the desired stent length;

applying a radially outward force to the stent structure to expand the uncovered
releasing the deployable-portion from the catheter into the vessel, wherein the uncovered
deployable-portion expands to engage a wall of the vessel while a remaining portion of the
stenting structure remains covered releasably-disposed in the catheter.

21. (Currently amended) The method of claim 20 wherein adjusting the length of the uncovered deployable-portion comprises positioning a first portion of the stenting structure shorter than the desired stent length in a position in the catheter for deployment, and positioning an additional portion of the stenting structure in the catheter adjacent to the first portion for deployment therewith.

22. (Currently amended) The method of claim 20 wherein adjusting the length of the uncovered deployable-portion comprises axially moving the deployable portion relative to the remaining portion.

23. (Original) The method of claim 20 further comprising:

determining a second stent length different than the desired stent length;

selecting a second portion of the stenting structure having the second stent length;

and

releasing the second portion in the vessel, wherein the second portion expands to engage a wall of the vessel.

24. (Currently amended) The method of claim 20 wherein applying the radially outward force ~~releasing the deployable portion~~ comprises expanding an expandable member, further comprising adjusting the length of the expandable member to be at least as long as the uncovered portion of the stent ~~according to the desired stent length~~.

25. (Currently amended) The method of claim 20 wherein the stenting structure comprises a plurality of stent segments and adjusting the length of the uncovered ~~deployable portion~~ comprises repositioning a first stent segment relative to a second stent segment.

26. (Original) The method of claim 25 wherein the stent segments are connected by separable couplings.

27. (Original) The method of claim 25 wherein the stent segments are unconnected to each other.

28. (Cancelled)

29. (Currently amended) The method of claim ~~20~~ 26 wherein the covered ~~selected~~ stent segment is constrained by a sheath disposed over the covered ~~selected~~ stent segment.

30.-32. (Cancelled)

33. (Currently amended) The method of claim 20 wherein adjusting the length of the uncovered ~~deployable portion~~ comprises engaging using a valve member against the stenting structure on the catheter to separate the uncovered ~~deployable portion~~ from the covered ~~a remaining portion of the stenting structure~~.

34. (Original) The method of claim 33 wherein a sheath is slidably disposed over the stenting structure, the valve member being disposed at a distal end of the sheath.

35. (Currently amended) The method of claim 23 wherein the uncovered ~~deployable-portion~~ and the second portion are deployed from a fixed position relative to the distal end of the catheter.

36. (Currently amended) The method of claim 20 wherein the stenting structure has a leading end closest to the distal end of the catheter, and wherein adjusting the length of the uncovered ~~deployable-portion~~ comprises selecting a desired length of the stenting structure extending proximally from the leading end thereof.

37. (Currently amended) The method of claim 20 wherein the stenting structure is continuously connected through the length thereof, and adjusting the length of the uncovered ~~deployable-portion~~ comprises separating the deployable portion of the stenting structure from a covered ~~remaining-portion~~ of the stenting structure at a selectable location on the stenting structure.

38. (Currently amended) The method of claim 37 wherein adjusting the length of the uncovered ~~deployable-portion~~ comprises severing the stenting structure at the selectable location.

39. (Currently amended) The method of claim 20 wherein adjusting the length of the uncovered ~~deployable-portion~~ comprises advancing the desired length of the stent structure distally of the catheter.

40. (Currently amended) The method of claim 37 wherein the uncovered ~~deployable-portion~~ is separated following deployment by the deployment mechanism.

41. (Original) The method of claim 37 wherein the stenting structure is a coil.

42. (Original) The method of claim 37 wherein the stenting structure is a mesh.

43.-49. (cancelled).